

**ABSTRACT**

*The invention relates to apparatus replacing atmospheric oxygen with an inert gas such as N<sub>2</sub> from the minimum of one laminar air boundary layer of substrates moving in the direction of advance, for instance fast moving lines of material fitted with a first chamber which is only open toward the said substrate and otherwise is sealed off by the surrounding outer space, said first chamber comprising in the zone of its front sealing edge, transversely to the direction of advance, a front corona electrode fed with high DC voltage and associated with a front mate electrode on the other substrate side, and a further corona electrode on the same substrate side mounted on a further sealing edge transverse to the direction of advance, said further corona electrode being fed with high DC voltage and being associated with a further mate electrode on the other substrate side, and including a device feeding the said inert gas. The invention is characterized in that the inert gas feed device issues in the vicinity directly behind the partial-vacuum zone which is formed directly behind the electron/ion flow of the further corona electrode.*